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Fluorescent Dye Doped Optical Waveguide

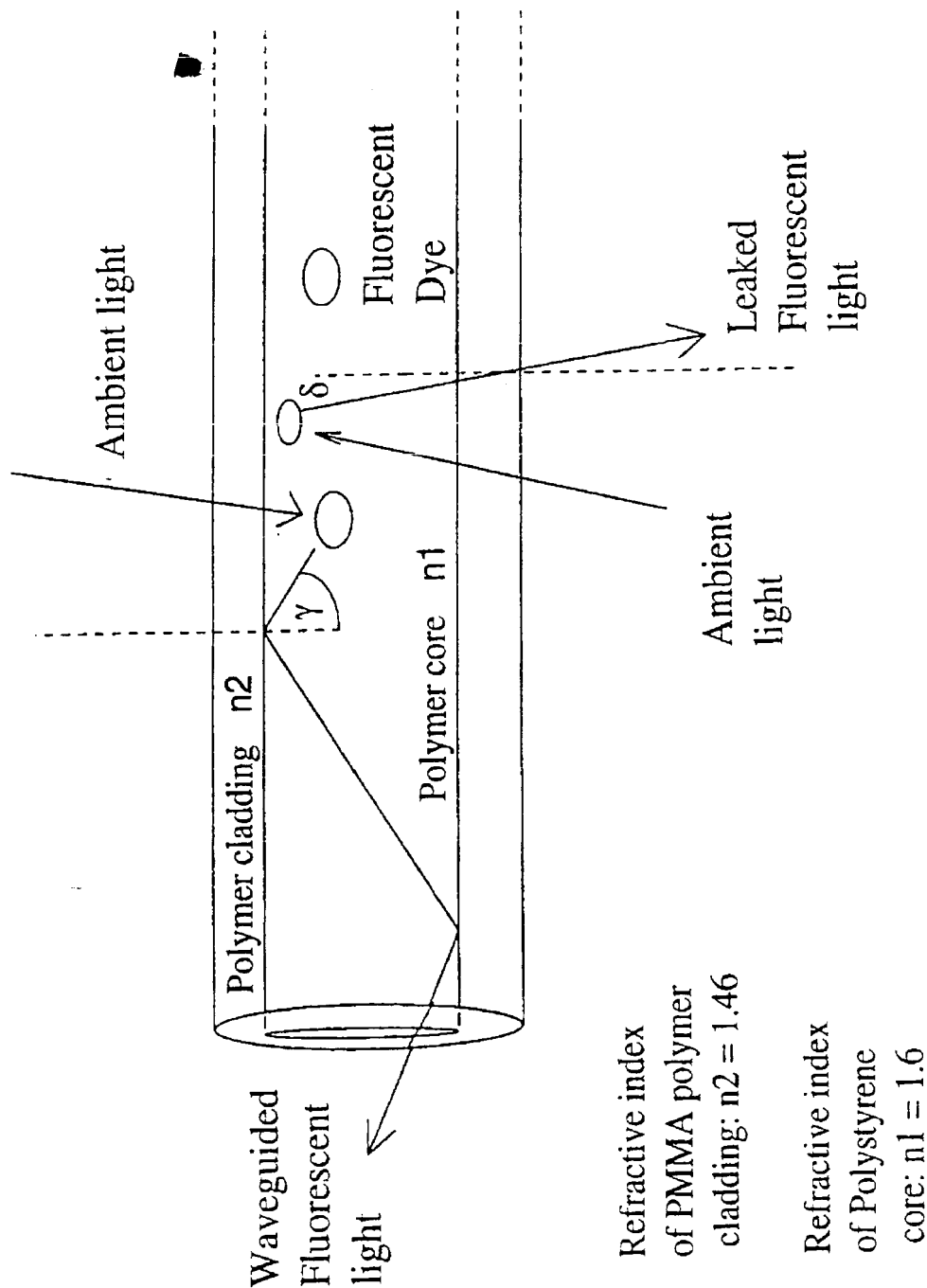


Fig 1

Absorption-Emission spectra of Nile Red in polystyrene

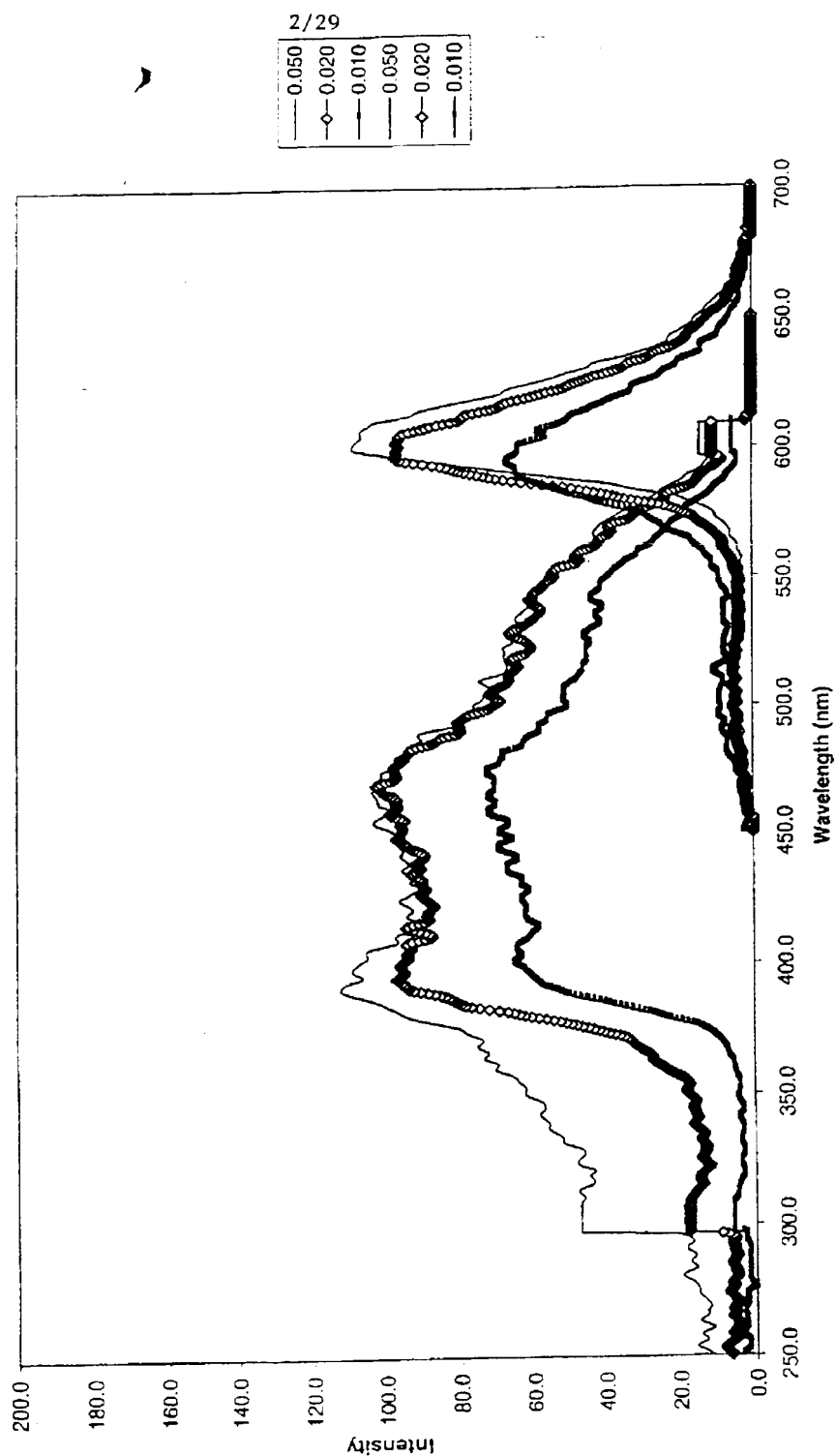
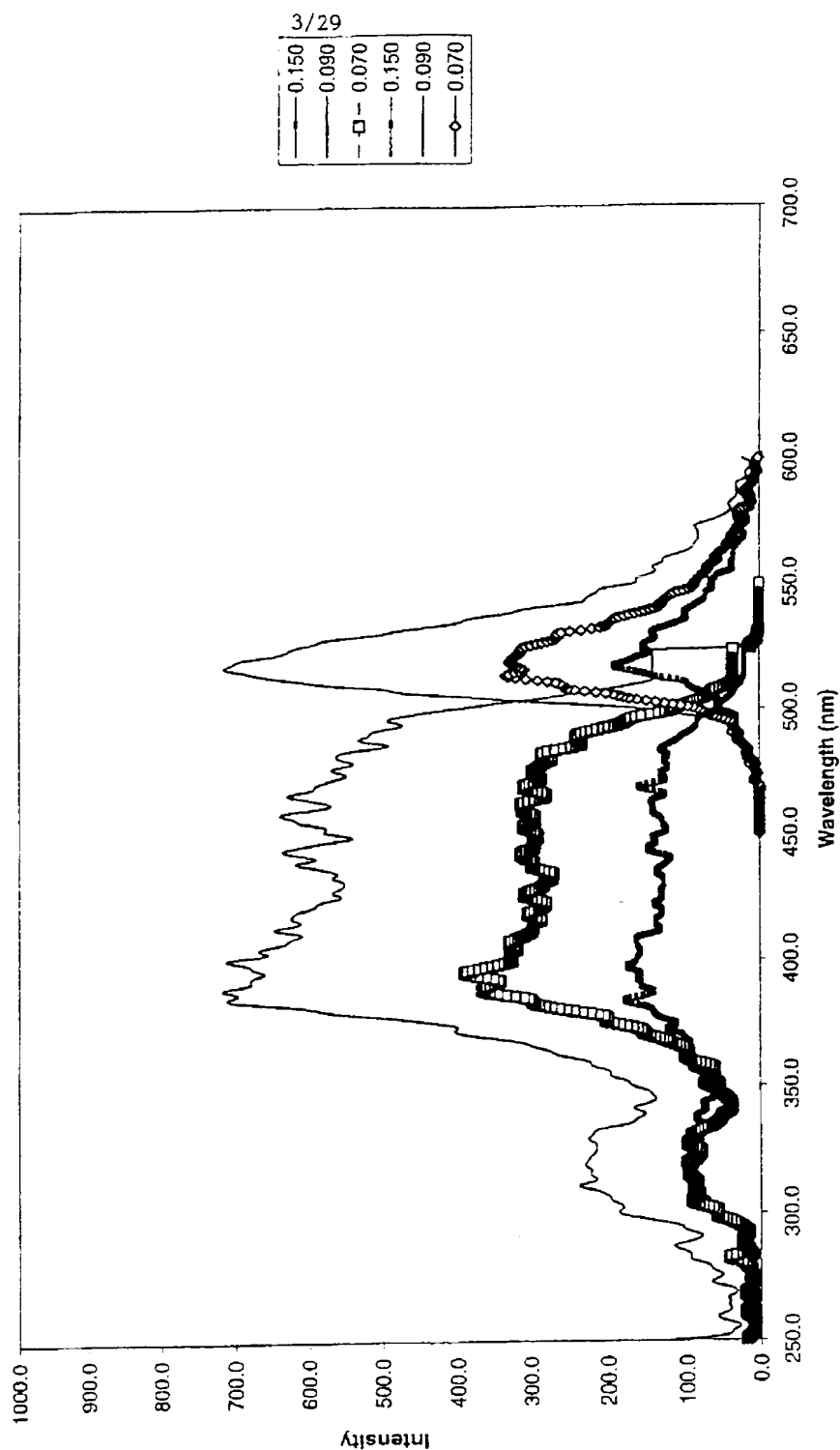


Fig 2

Absorption-Emission spectra of Coumarin 6 in polystyrene



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Absorption-Emission spectra of BisMSB

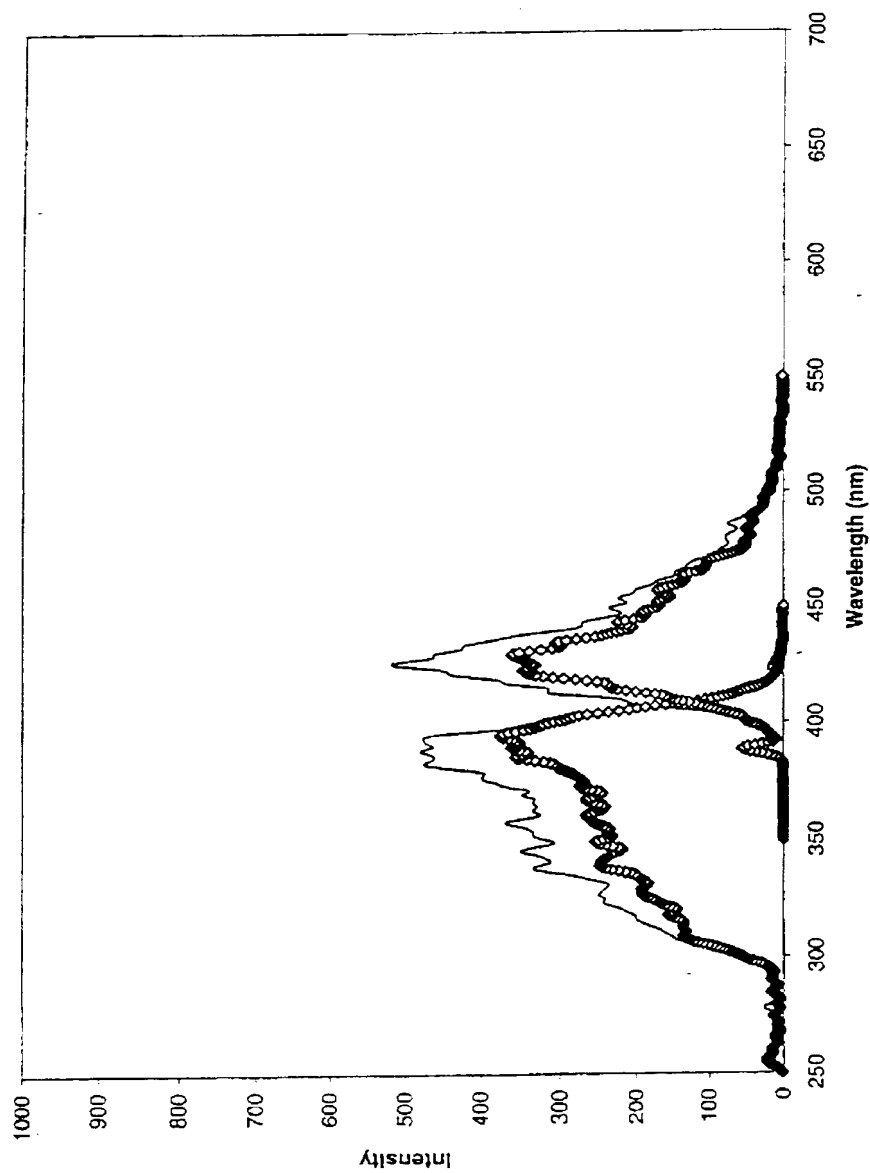


Fig 4

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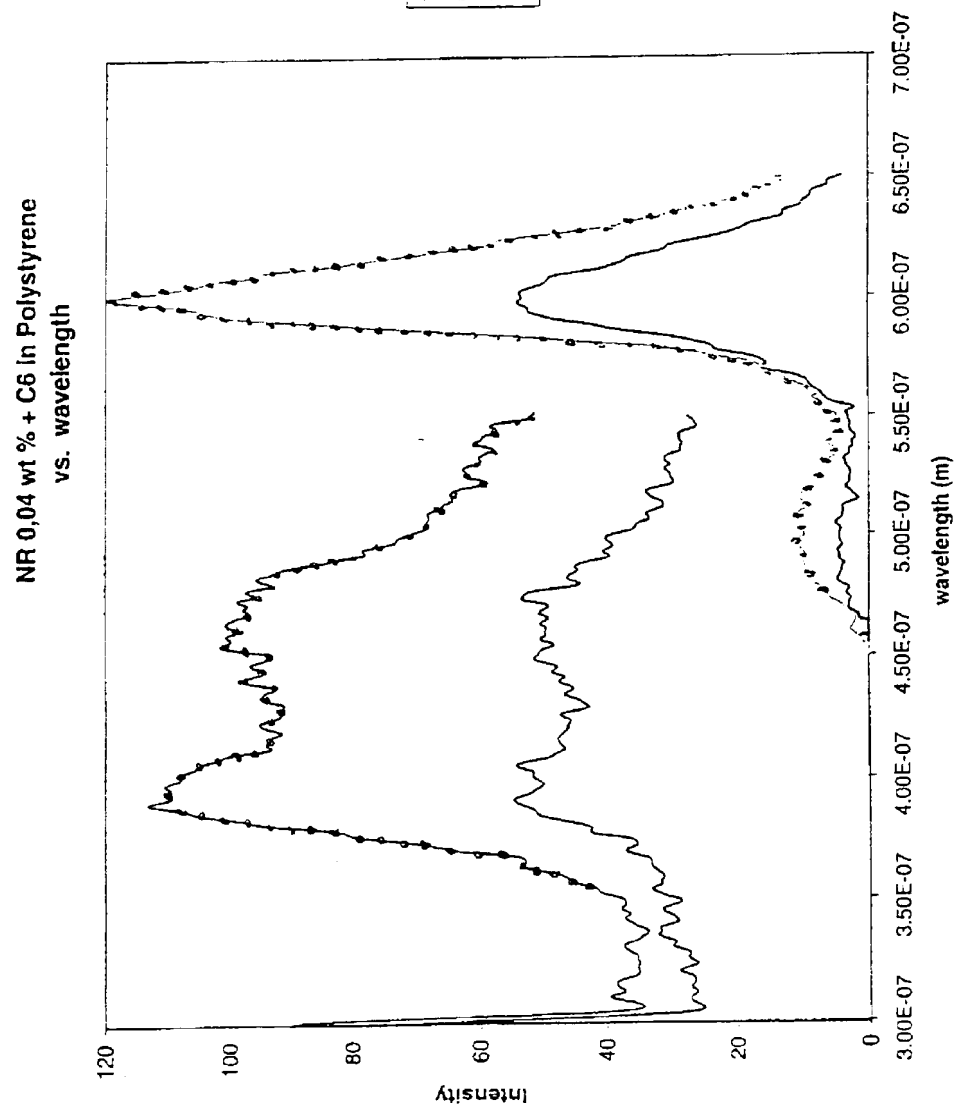


Fig 5

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* Nile Red + Coumarin 6

Nile Red + Coumarin 6 in Polystyrene

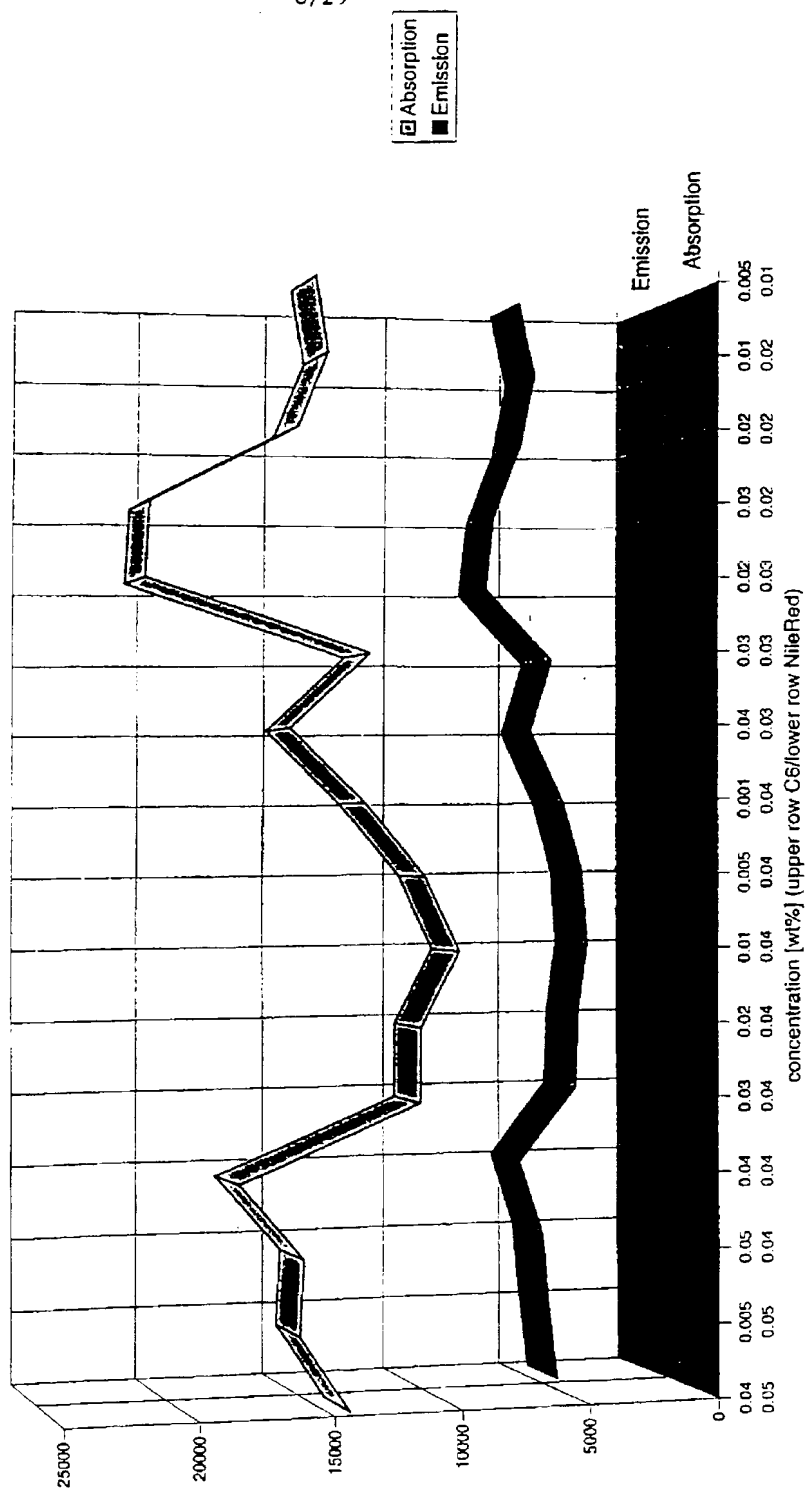


Fig 6

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Absorption - Emission Area of Nile Red 0,04% + Coumarin 6 + BisMSB

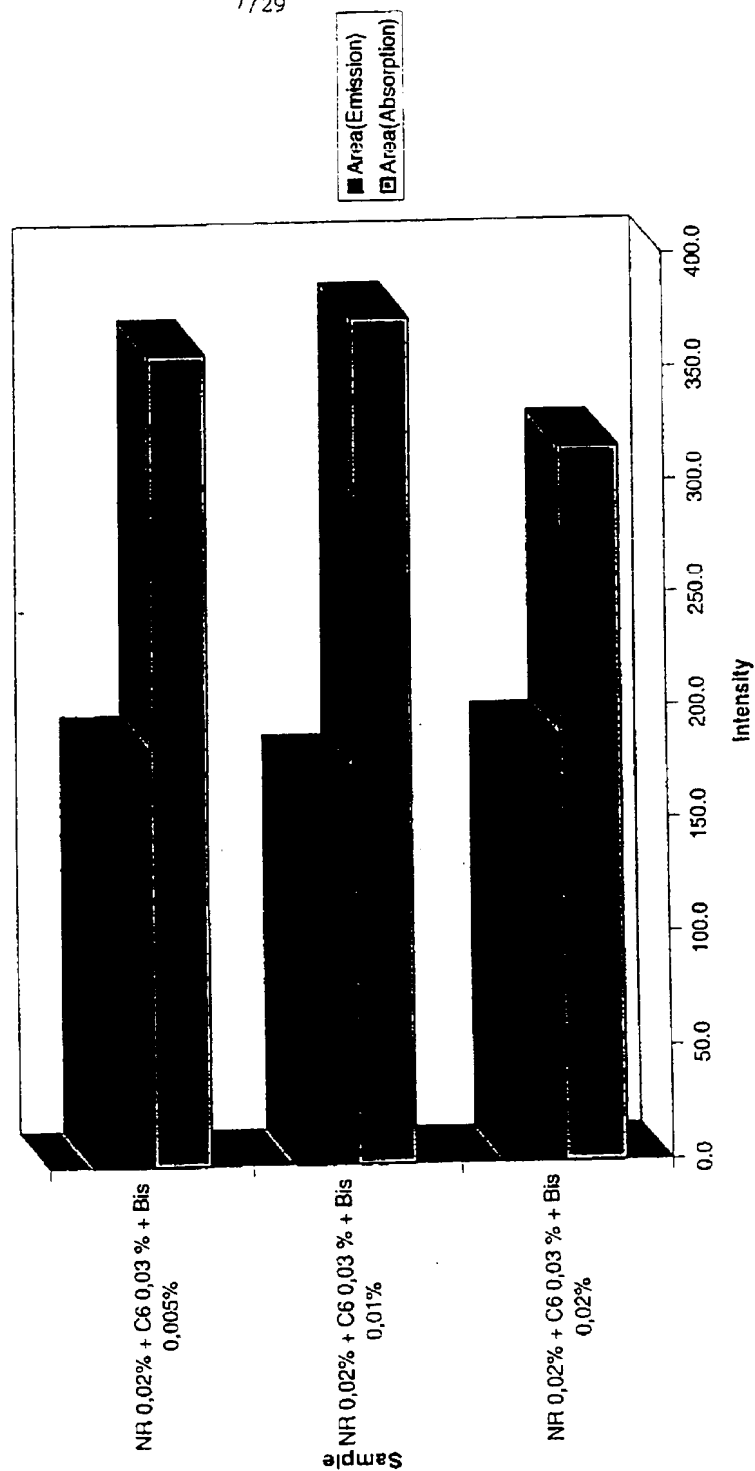


Fig 7

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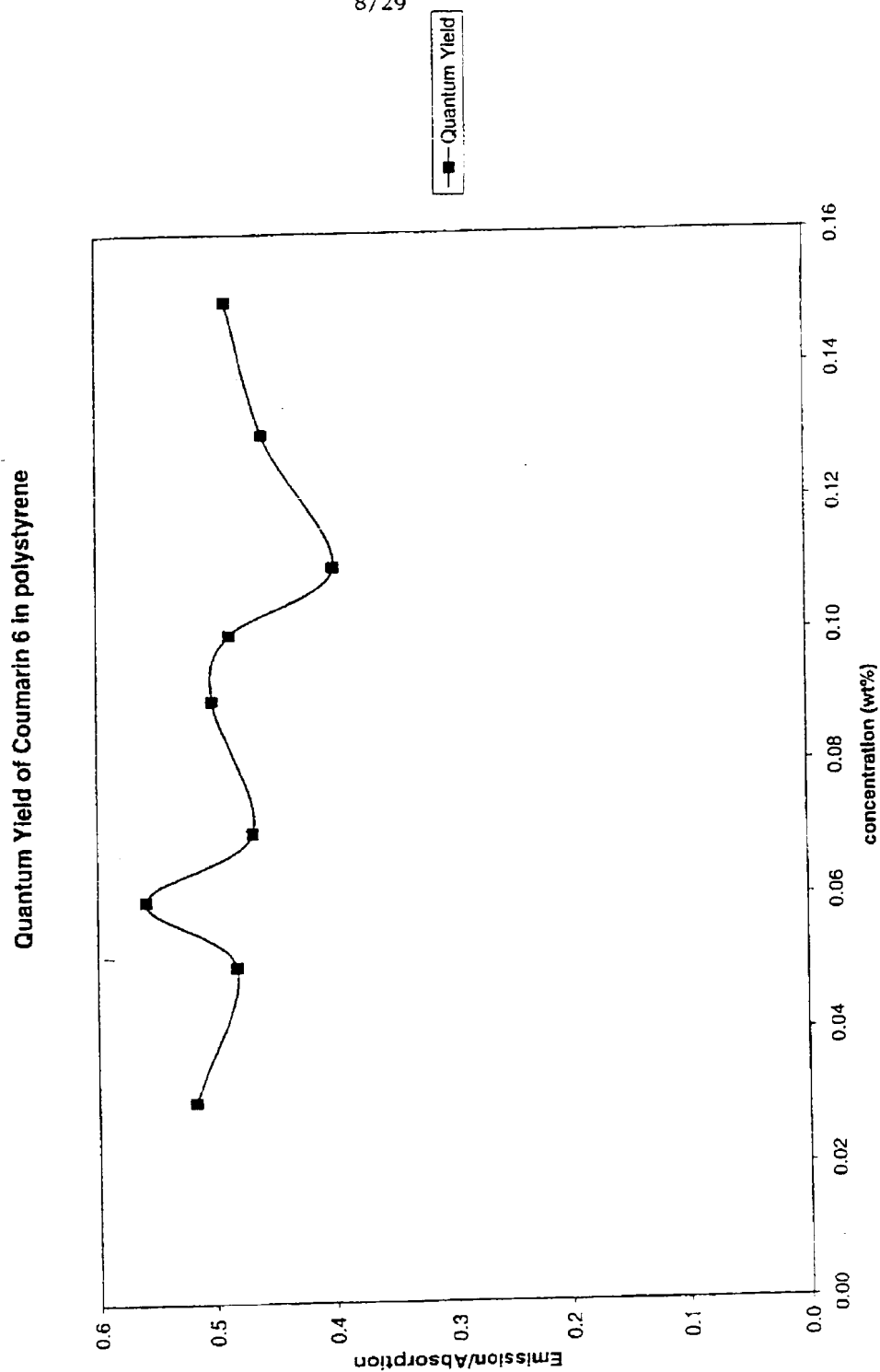


Fig 8

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Absorption-Emission Area of Coumarin 6 in polystyrene

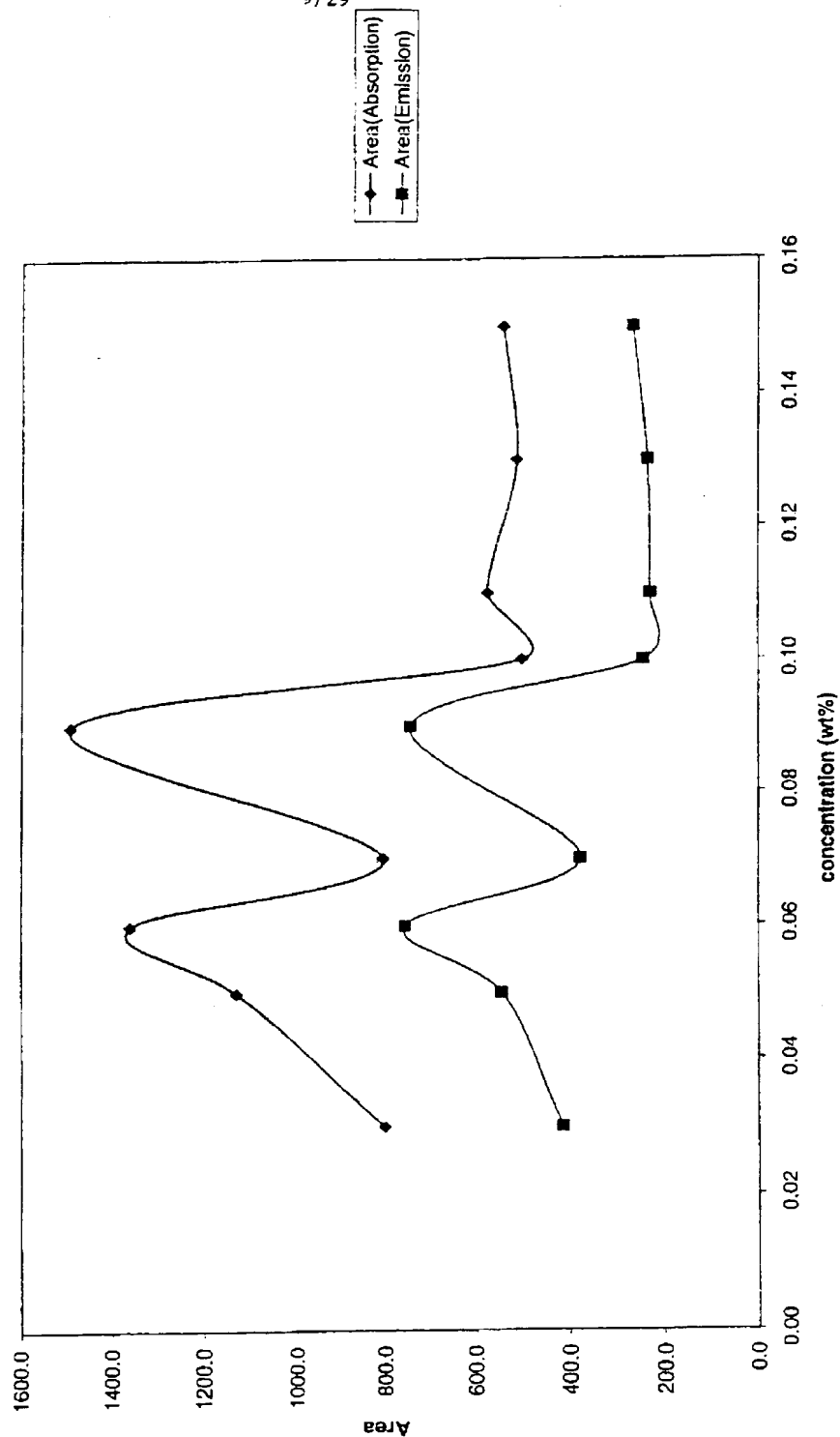


Fig 9

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Quantum Yield of BisMSB in polystyrene

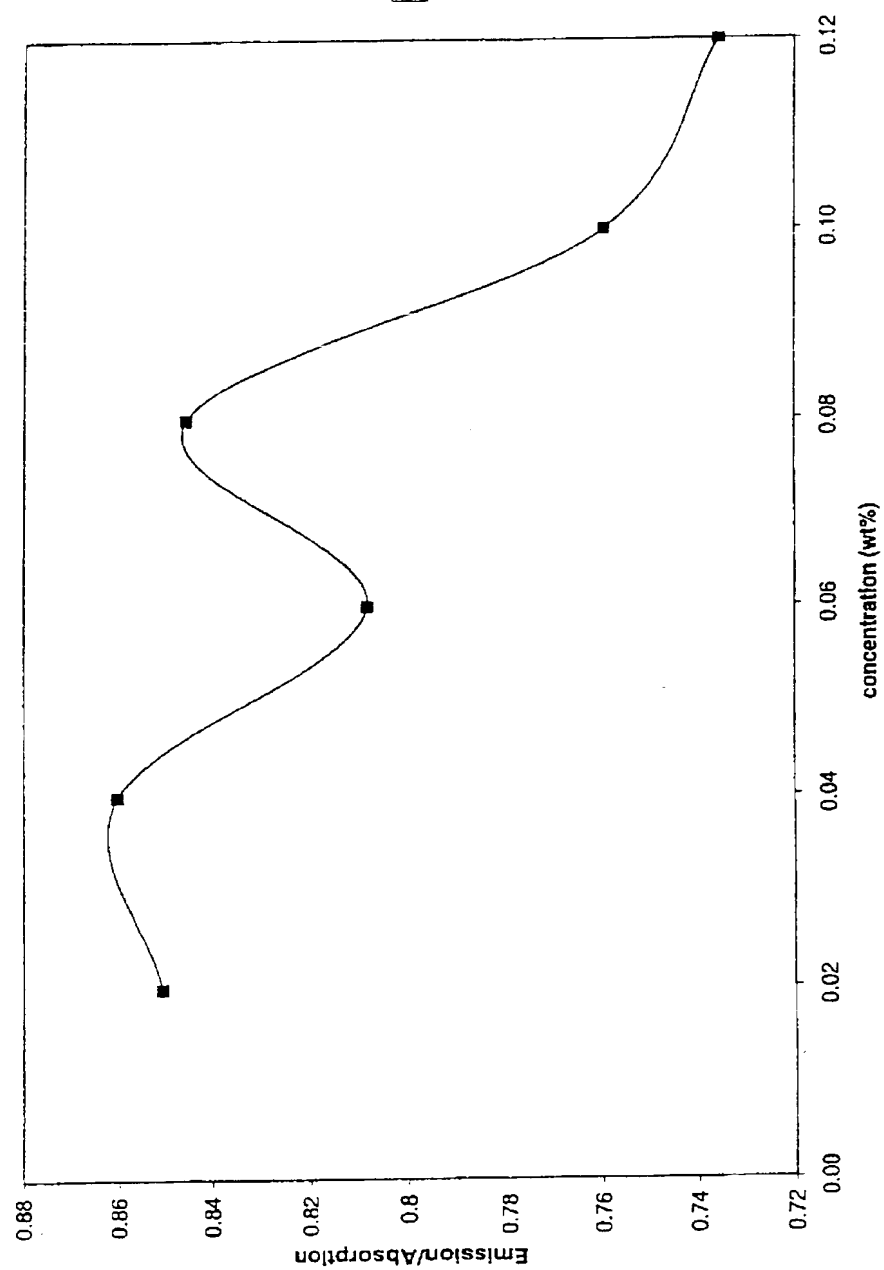
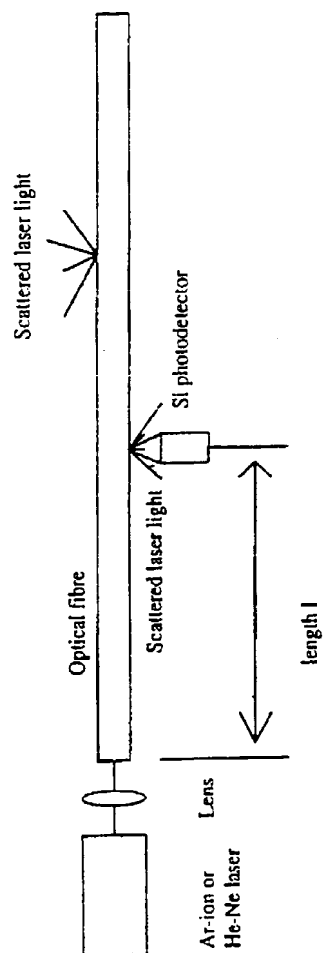


Fig 10

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Arrangement for light scattering/Absorption measurements

Fig 11

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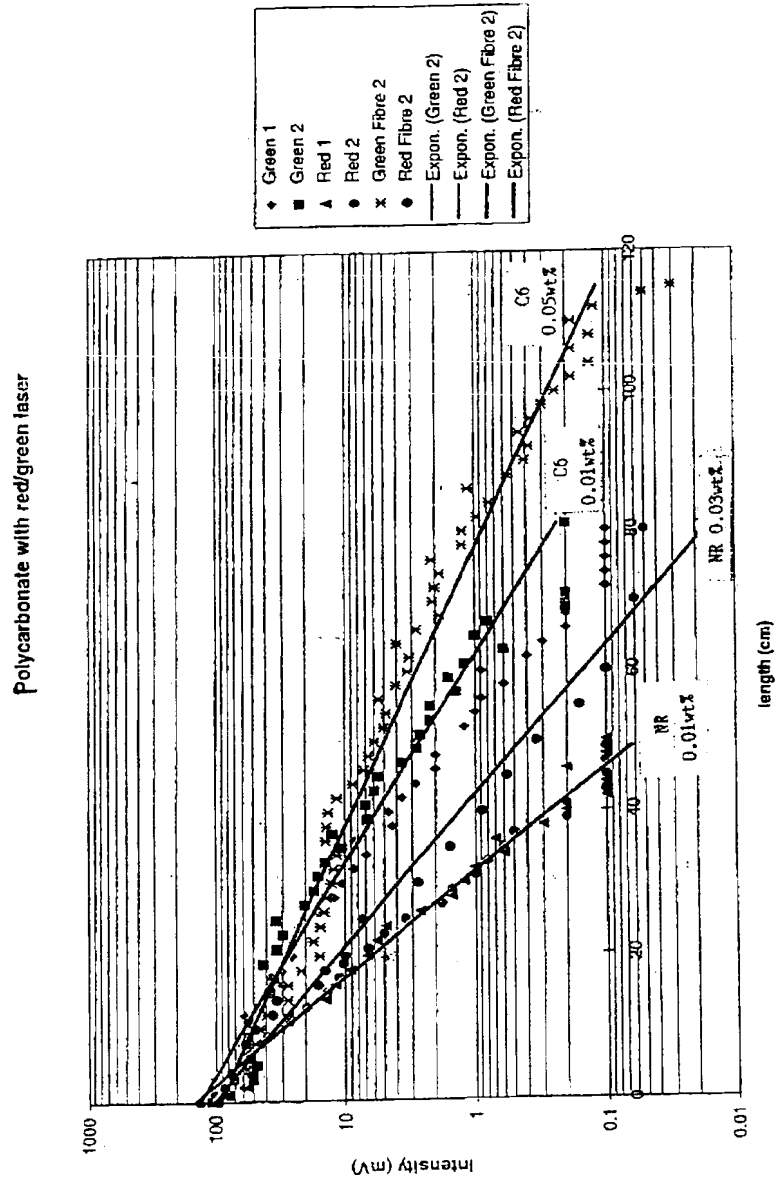


Figure 12

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Refractive Index of C6 doped polystyrene

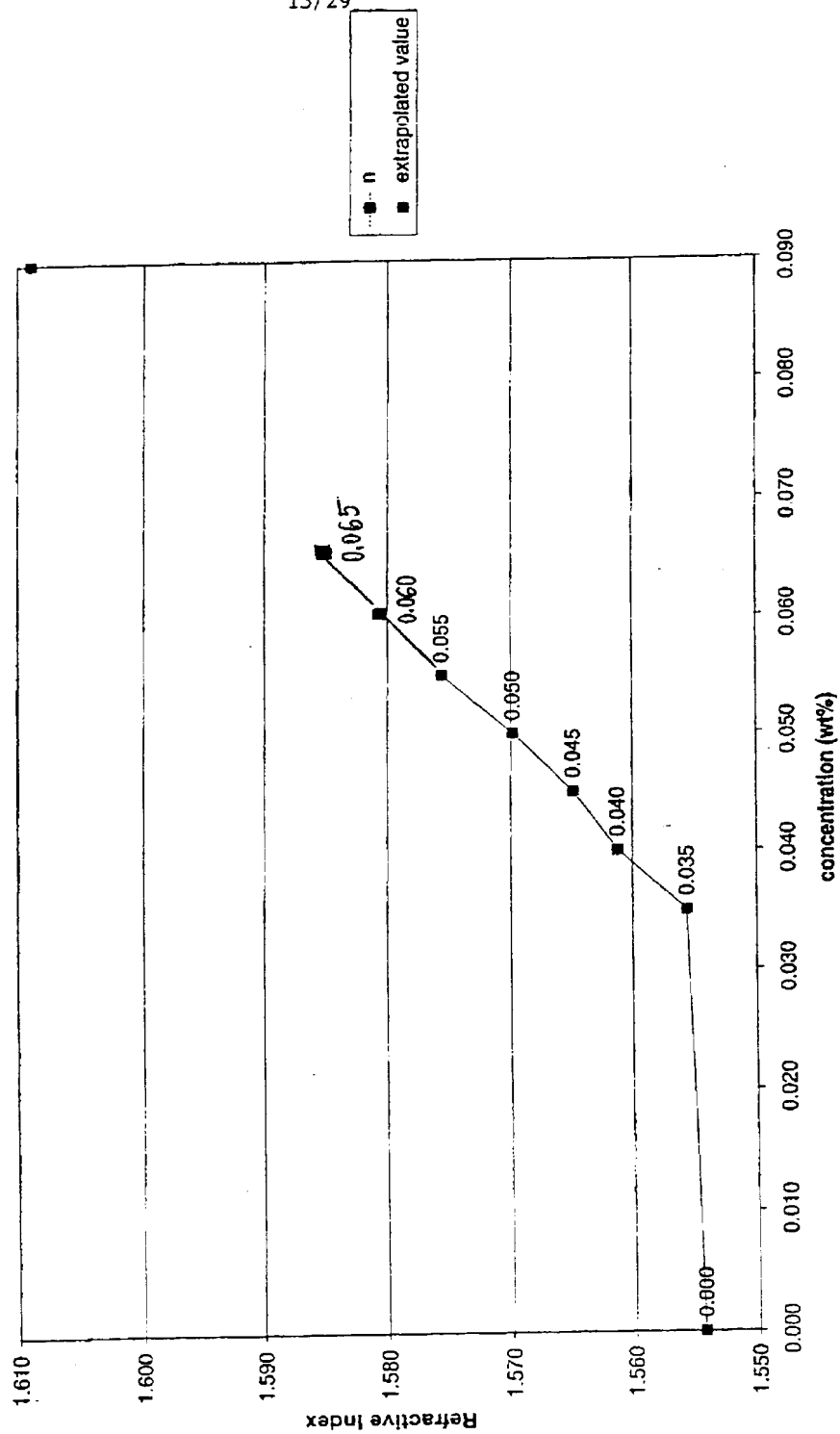


Fig 13

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Intensity of the green/red fibre in sunlight while fibres are partially covered (normalised and an average of 7 measurements/ y-errors equals 2σ)

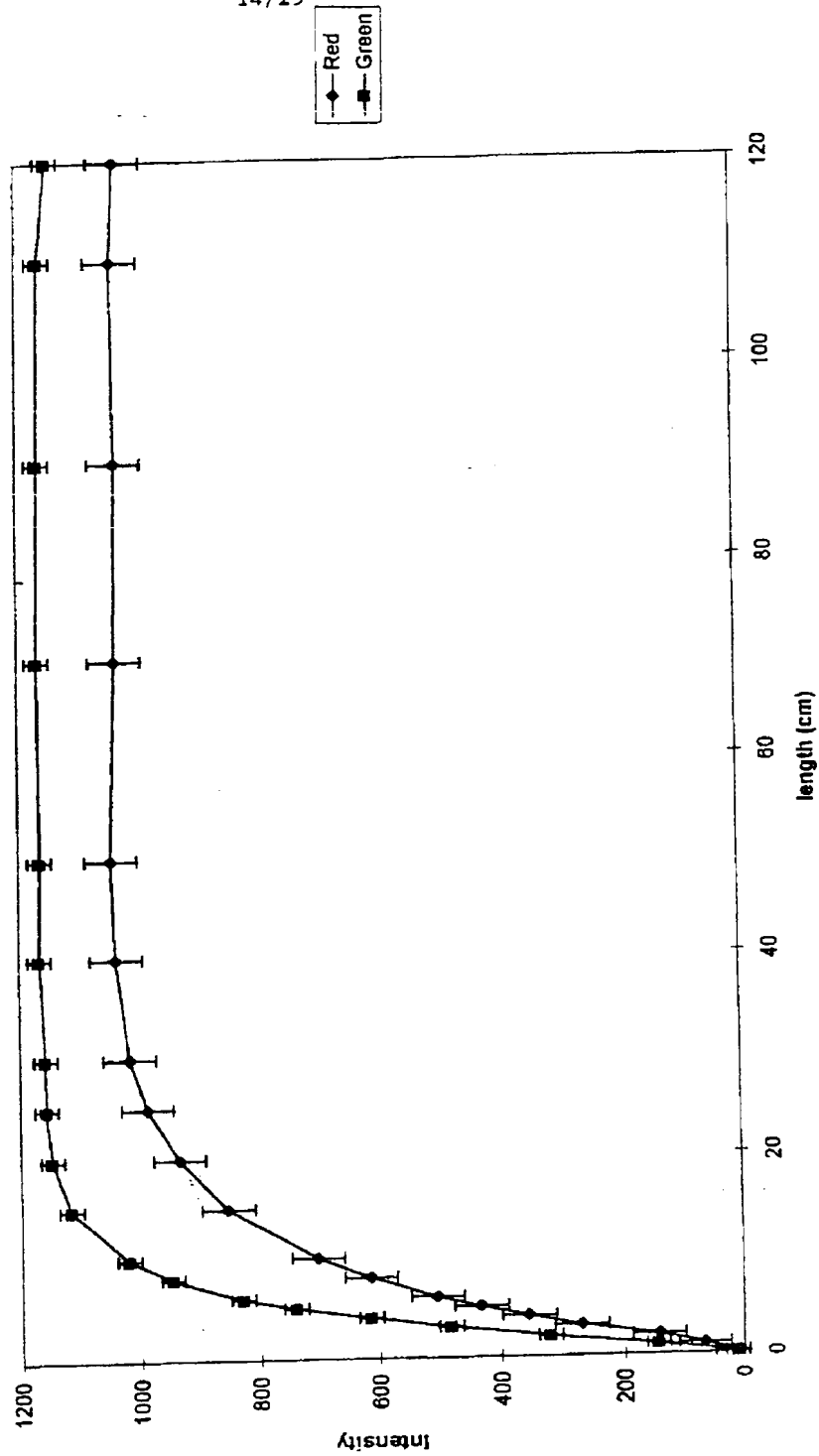


Fig 14

09/744709

Figure 15

Structure of Light Emitting Polymer in combined reflective and transmissive mode

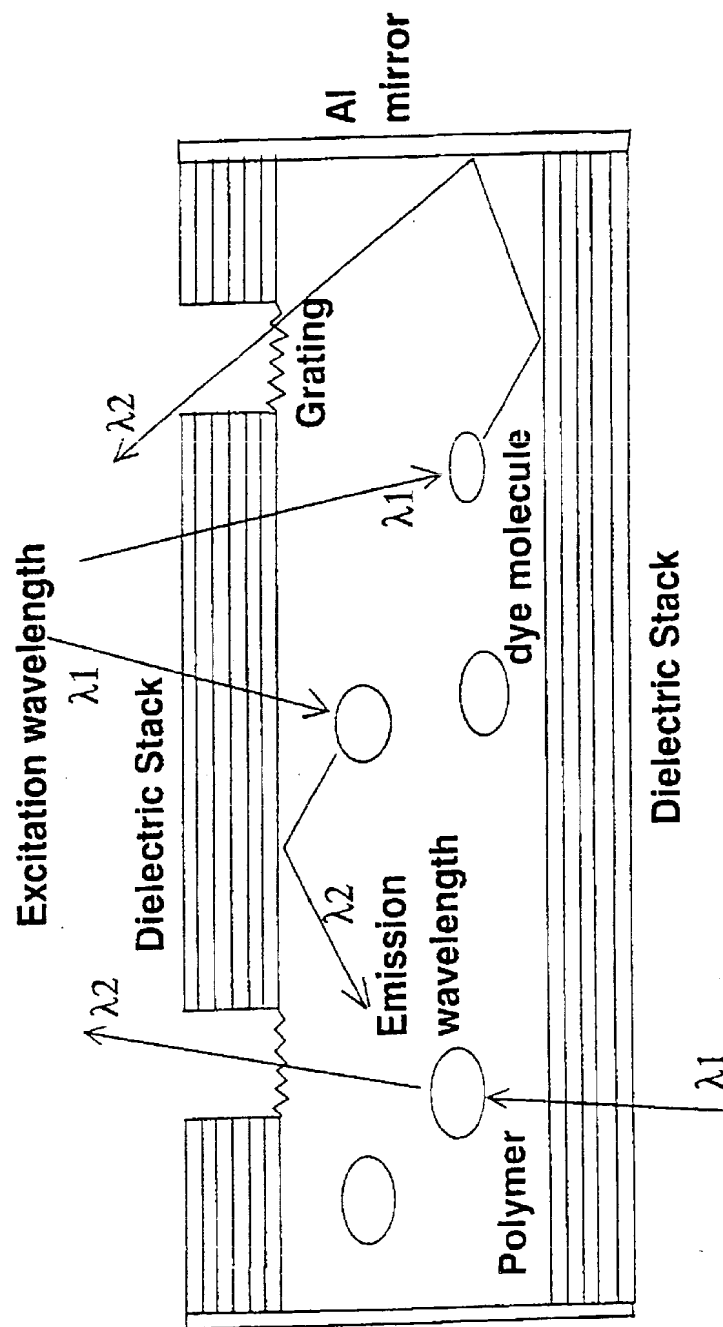
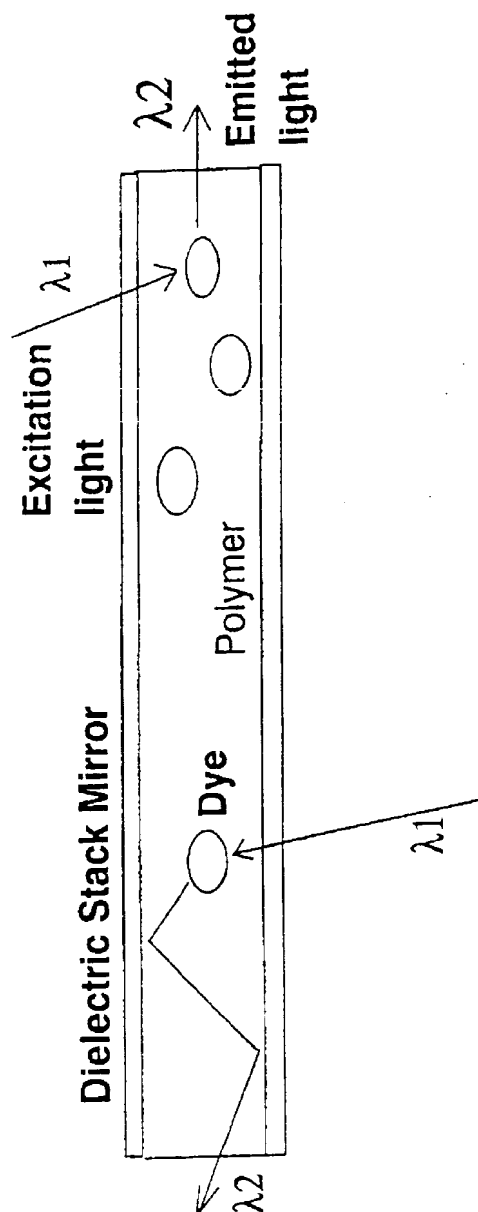


Figure 16

Structure of Light Emitting Polymer in the Edge Emitting Mode



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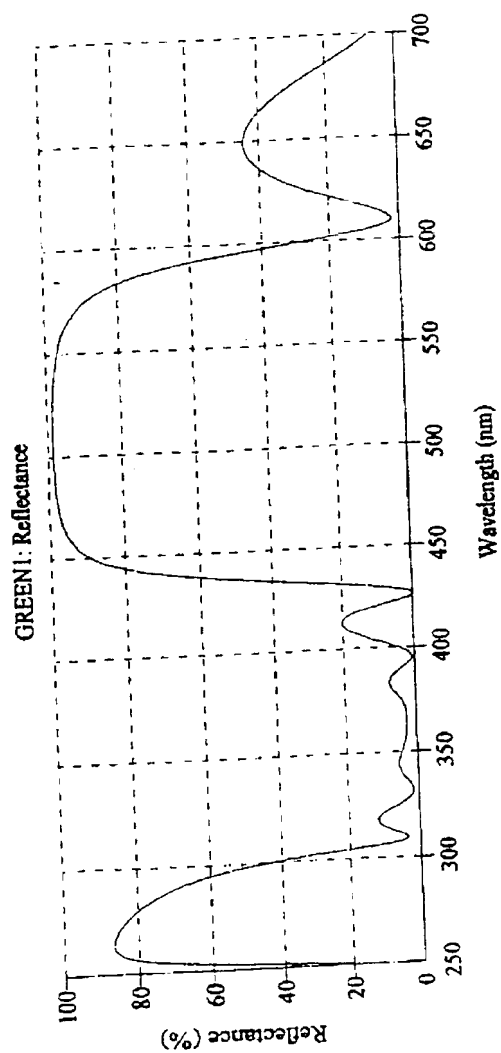


Fig 17

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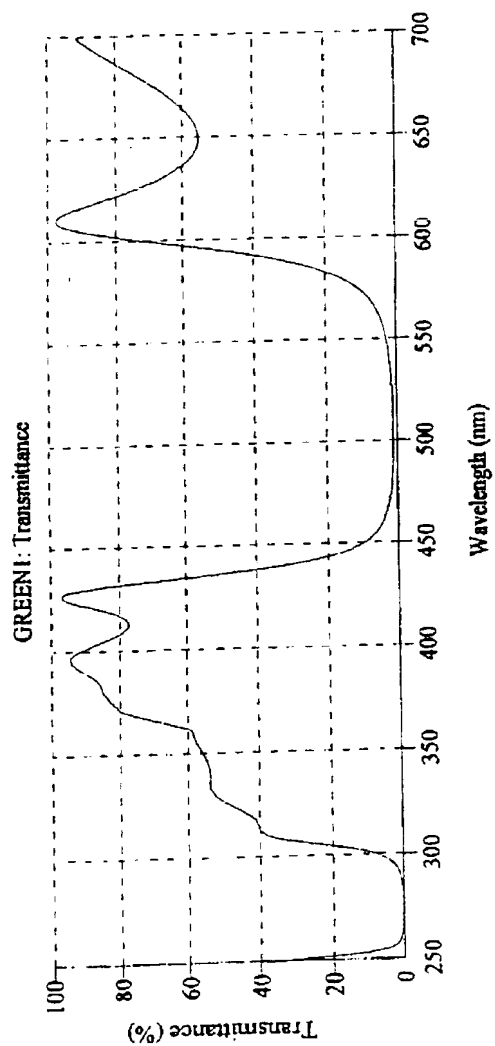


Fig 18

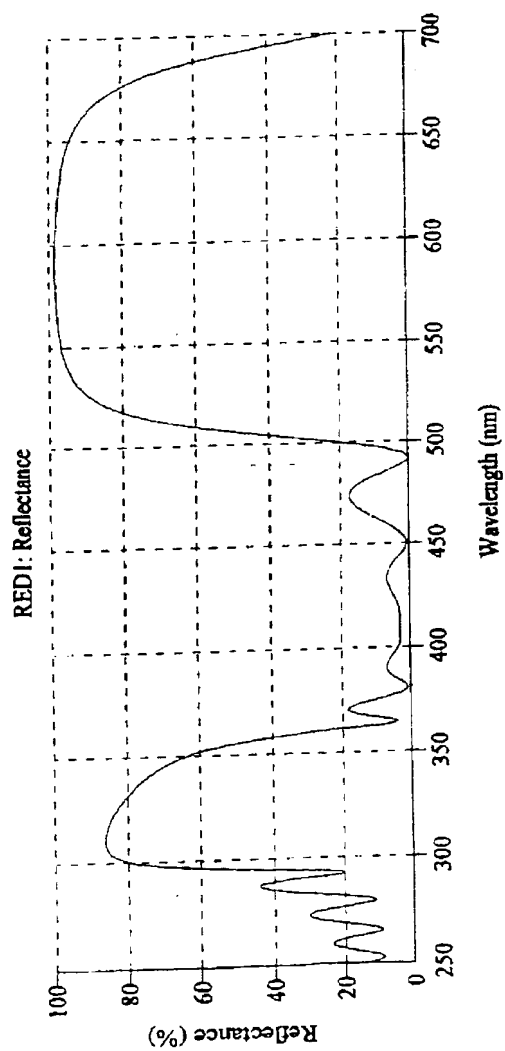


Fig 19

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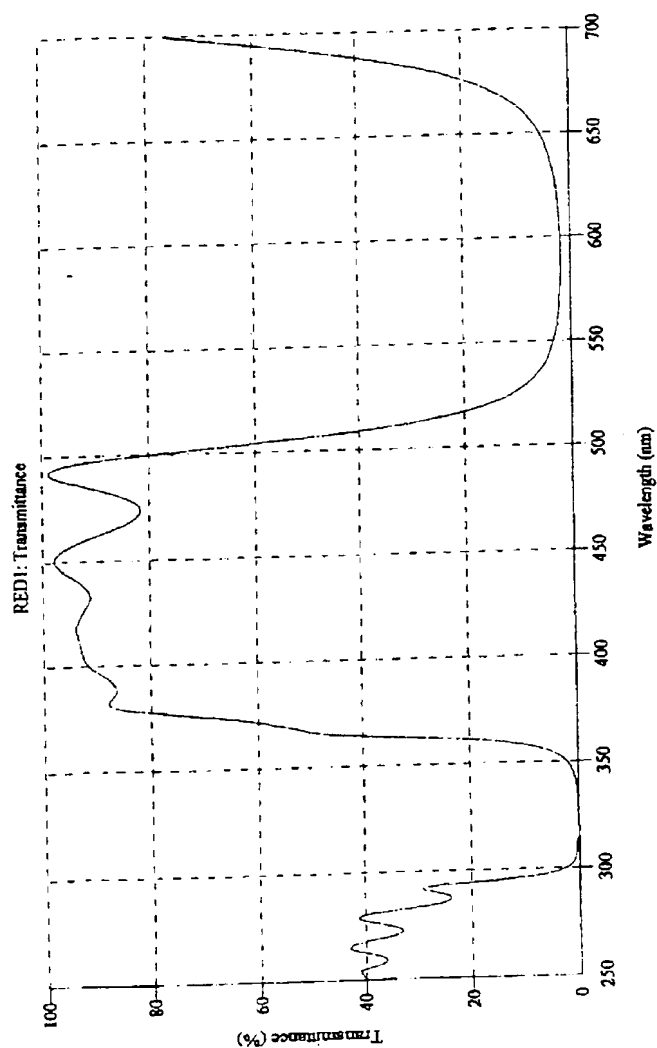
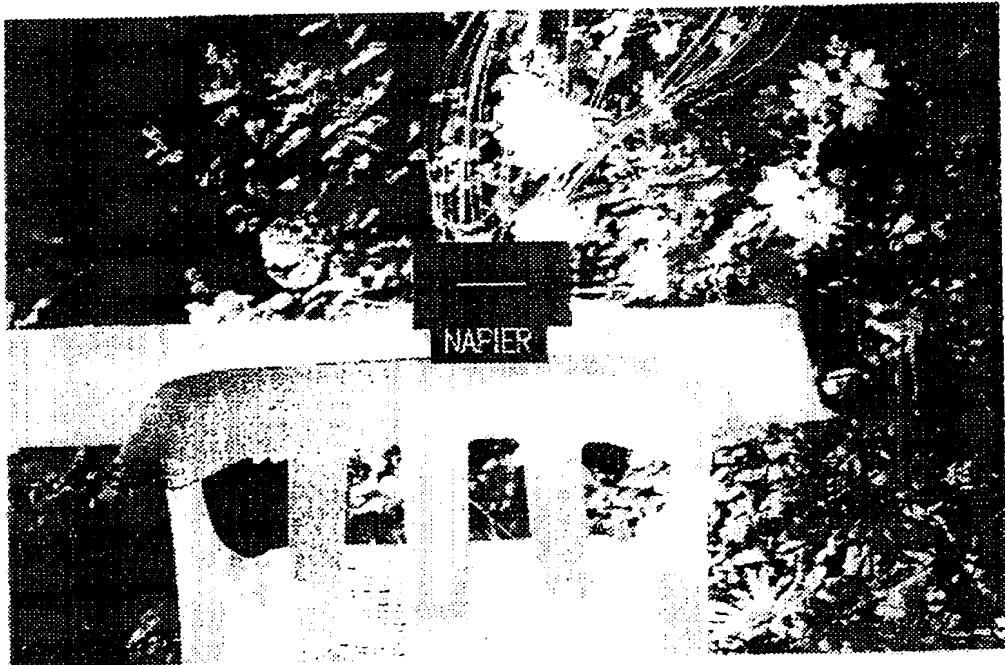
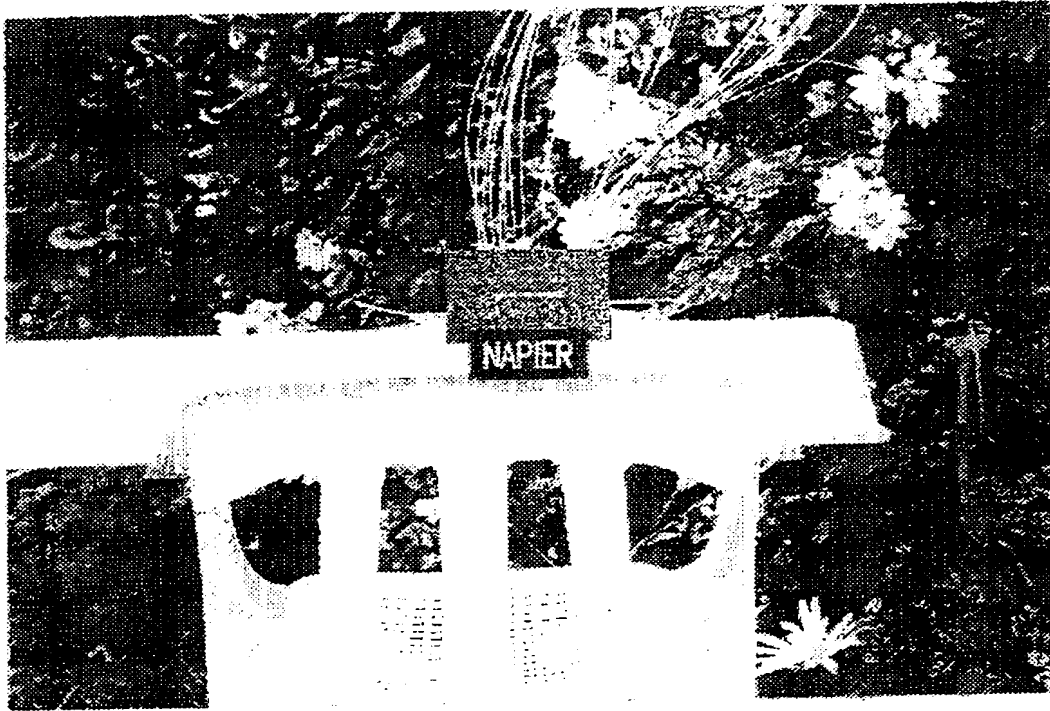


Fig 20



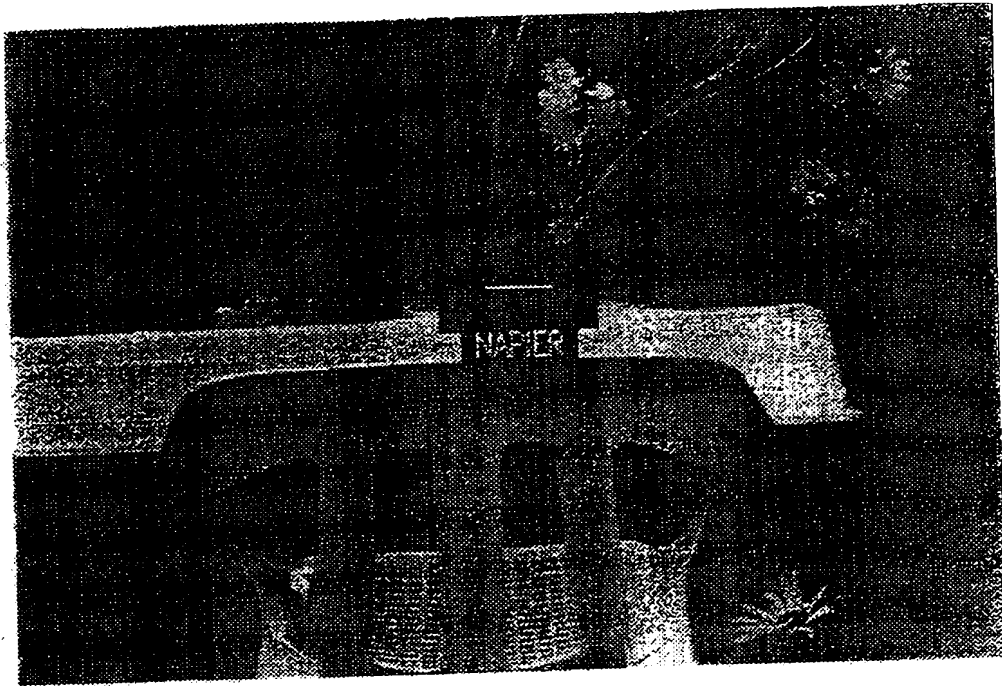
Full Sunlight

Figure 21



Cloudy

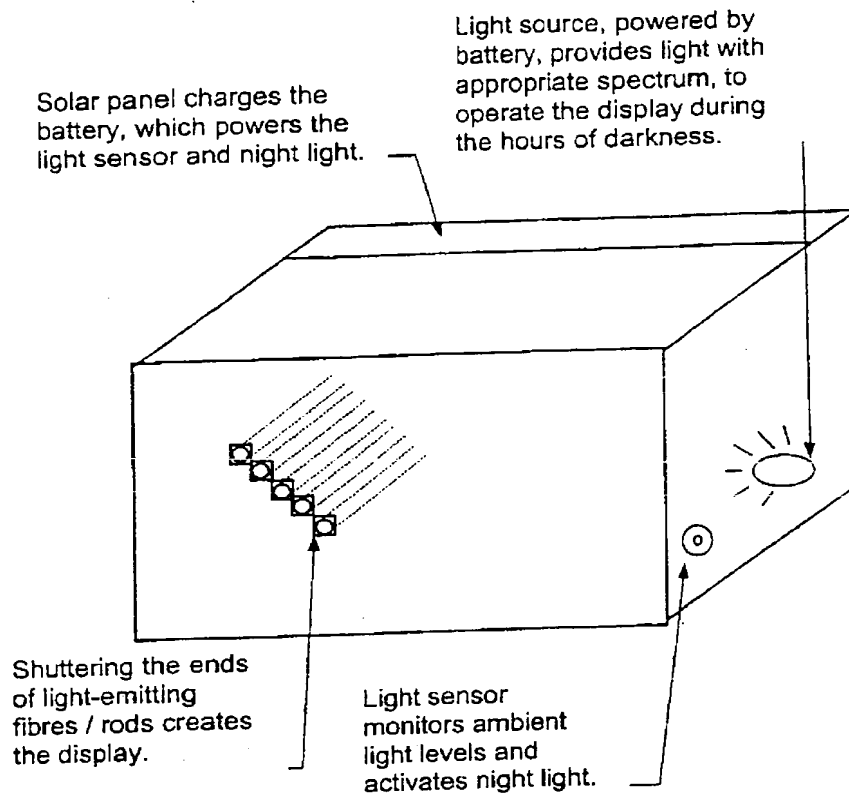
Figure 22



**Late Evening
(2 Hours After Sunset)**

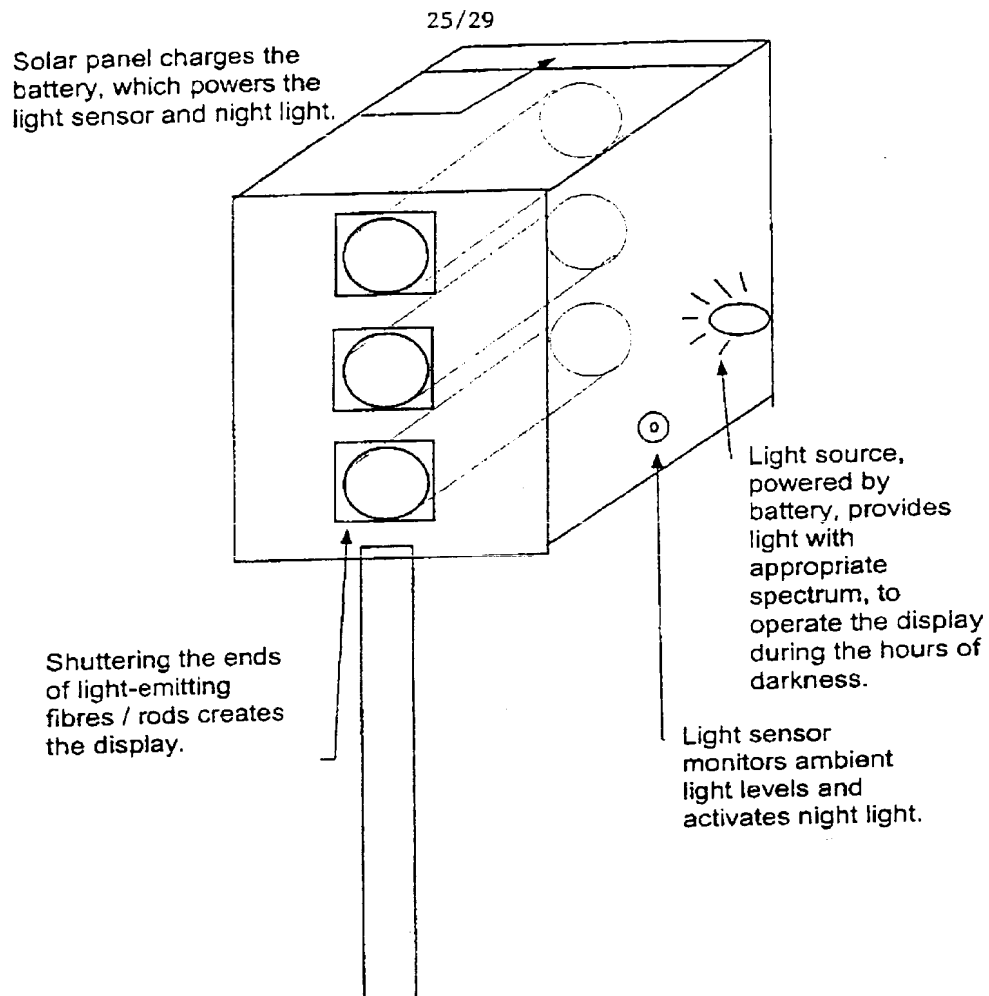
Figure 23

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24 Hour Road Signage

Fig 24

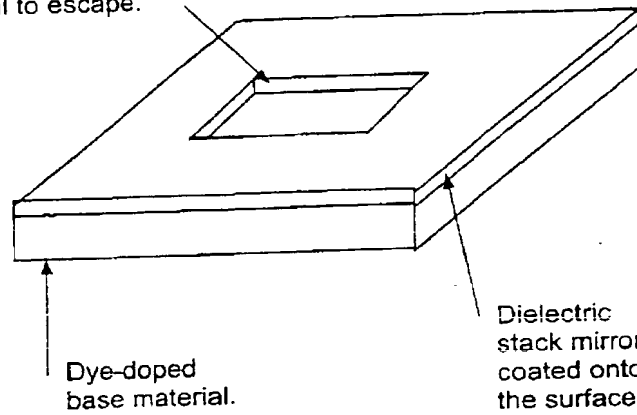


24 Hour Traffic Lights

Fig 25

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Dielectric stack mirror
removed from the
surface, permitting the
trapped light from the
bulk material to escape.



Fixed Advertisement.
Polymer sheet with dielectric stack
mirror coated on the surface

Fig 26

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Sheet of
light-emitting
doped
material.

Sheet of light-
absorbing
material

Transparent
material in
the shape of
a peg.

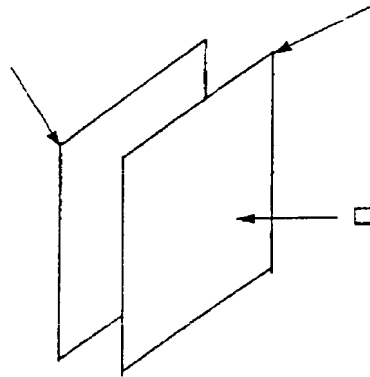


Fig 27

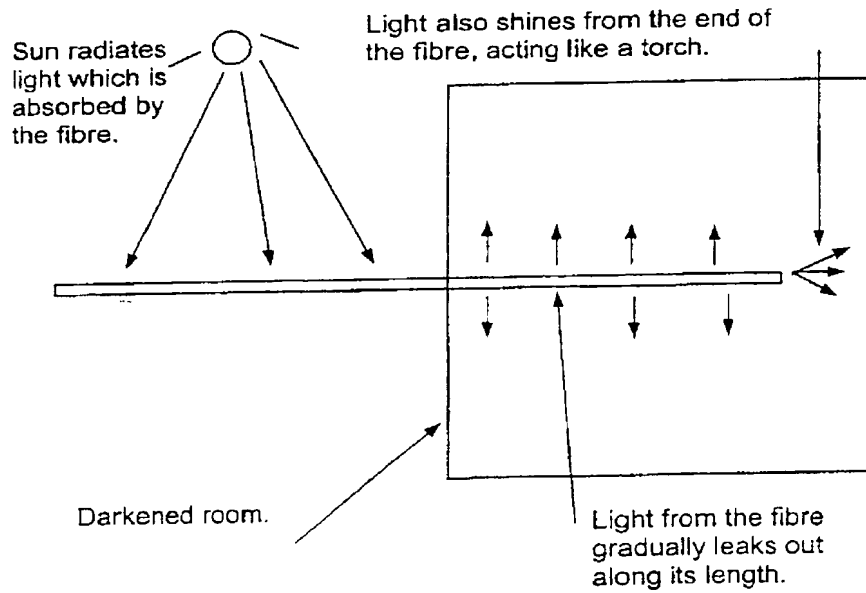


Fig 28

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Light-emitting
rods angled
towards
aircraft.

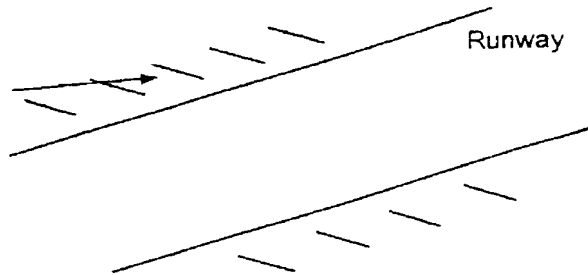
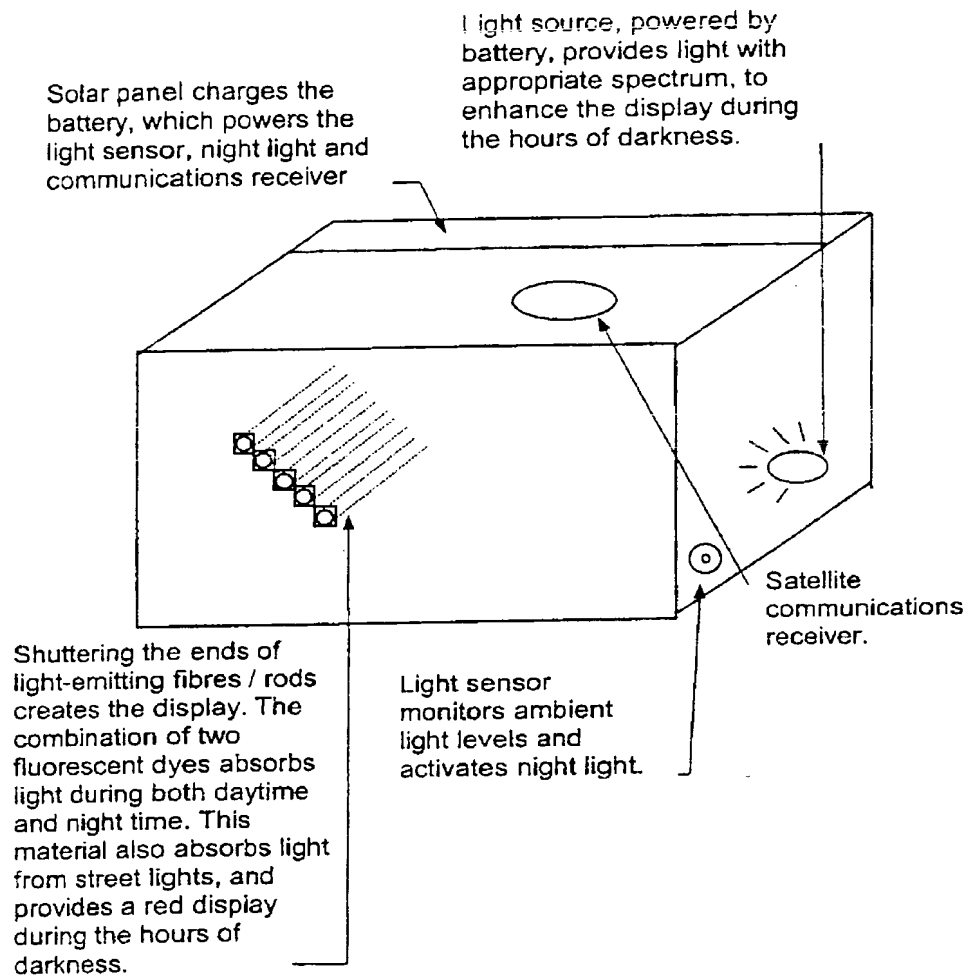


Fig 29

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24 Hour Bus Arrival Schedule

Fig 30